INDEX TO AUTHORS

ADDIS, T., GRAY, HORACE, and BARRETT, EVALYN. Food protein effect on plasma specific gravity, plasma protein, and hematocrit value, 353

AINSLIE, JOHN. See BROWN, FRANCIS, and AINSLIE, 21

ALLEN, J. GARROTT, SANDERSON, MARGARET, MILHAM, MARY, KIRSCHON, ALICE, and JACOBSON, L. O. Heparinemia (?). An anticoagulant in the blood of dogs with hemorrhagic tendency after total body exposure to Roentgen rays, 71

BARRETT, EVALYN. See ADDIS, GRAY, and BARRETT, 353

BARRON, E. S. GUZMAN, BARTLETT, GRANT R., and MILLER, ZELMA BAKER. The effect of nitrogen mustards on enzymes and tissue metabolism. I. The effect on enzymes, 489

—, —, —, MEYER, JOE, and SEEGMILLER, J. E. The effect of nitrogen mustards on enzymes and tissue metabolism. II. The effect on tissue metabolism, 503

BARTLETT, GRANT R. See BARRON, BARTLETT, and MILLER, 489

—. See BARRON, BARTLETT, MILLER, MEYER, and SEEGMILLER, 503

BENDICH, AARON. See KABAT, BENDICH, BEZER, and KNAUB, 295

BEVILACQUA, ELLEN B., and MCCARTER, JANET R. The proteins in unheated culture filtrates of human tubercle bacilli. I. Fractionation and determination of physical-chemical properties, 229

—. See MCCARTER and BEVILACQUA, 245

BEZER, ADA E. See KABAT, BENDICH, BEZER, and KNAUB, 295

BLATTNER, RUSSELL J. See SMITH, BLATTNER, HEYS, and MILLER, 119

BOVARNICK, MAX. See DE BURGH, YU, HOWE, and BOVARNICK, 1

BROWN, GORDON C., FRANCIS, THOMAS, JR., and AINSLIE, JOHN. Studies of the distribution of poliomyelitis virus. V. The virus in familial associates of cases, 21

CHINARD, FRANCIS P., and EDER, HOWARD A. The determination of the concentration of the dye T-1824 in normal and lipemic plasmas, 473

CHURCH, EDWIN H. See TERRY, HAWKINS, CHURCH, and WHIPPLE, 561

COHEN, SEYMOUR S., and FOWLER, CATHERINE B. Chemical studies in host-virus interactions. V. Some additional methods of determining nutritional requirements for virus multiplication, 275

—. See FOWLER and COHEN, 259

DE BURGH, PATRICK M., YU, PEN-CHUNG, HOWE, CALDERON, and BOVARNICK, MAX. Preparation from human red cells of a substance inhibiting virus hemagglutination, 1

DUNKLIN, EDWARD W., and PUCK, THEODORE T. The lethal effect of relative humidity on air-borne bacteria, 87

EAGLE, HARRY, and FLEISCHMAN, RALPH. The antibody response in rabbits to killed suspensions of pathogenic *Treponema pallidum*, 369

EDER, HOWARD A. See CHINARD and EDER, 473

FLEISCHMAN, RALPH. See EAGLE and FLEISCHMAN, 369

FOWLER, CATHERINE B., and COHEN, SEYMOUR S. Chemical studies in host-virus interactions. IV. A method of determining nutritional requirements for bacterial virus multiplication, 259

—. See COHEN and FOWLER, 275

FRANCIS, THOMAS, JR. See BROWN, FRANCIS, and AINSLIE, 21

FRIEDMAN, CONSTANCE L. See FRIEDMAN, POLLEY, and FRIEDMAN, 329

FRIEDMAN, SYDNEY M., POLLEY, JOHN R., and FRIEDMAN, CONSTANCE L. The effect of desoxycorticosterone acetate on blood pressure, renal function, and electrolyte pattern in the intact rat, 329

GINSBERG, HAROLD S., GOEBEL, WALTHER F., and HORSFALL, FRANK L., JR. The effect of polysaccharides on the reaction between erythrocytes and viruses, with particular reference to mumps virus, 411

—, —, and —. The inhibitory effect of polysaccharide on mumps virus multiplication, 385

GOEBEL, WALTHER F., OLITSKY, PETER K., and SAENZ, ARTURO C. The inactivation of biologically active proteins, and the virus of Western equine encephalomyelitis by periodic acid, 445

—. See GINSBERG, GOEBEL, and HORSFALL, 385, 411

GOLDBLATT, HARRY. See GOLLAN, RICHARDSON, and GOLDBLATT, 29

GOLLAN, FRANK, RICHARDSON, EVELYN, and GOLDBLATT, HARRY. Studies on plant hypertensinase, 29

GRAY, HORACE. See ADDIS, GRAY, and BARRETT, 353

GREIFF, DONALD, and PINKERTON, HENRY. Effect of enzyme inhibitors and activators on the multiplication of typhus rickettsiae. III. Correlation of effects of PABA and KCN with oxygen consumption in embryonate eggs, 175

HARRIS, T. N. Studies in the relation of the hemolytic streptococcus to rheumatic fever. II. Fractionation of the hemolytic streptococcus by high speed centrifugation, 41

—. III. Complement fixation *versus* streptococcal nucleoproteins with the sera of patients with rheumatic fever and others, 57

HAWKINS, DAVID R. See TERRY, HAWKINS, CHURCH, and WHIPPLE, 561

HEYS, FLORENCE M. See SMITH, BLATTNER, HEYS, and MILLER, 119

HIRST, GEORGE K. The nature of the virus receptors of red cells. I. Evidence on the chemical nature of the virus receptors of red cells and of the existence of a closely analogous substance in normal serum, 301

—. II. The effect of partial heat inactivation of influenza virus on the destruction of red cell receptors and the use of inactivated virus in the measurement of serum inhibitor, 315

HORSFALL, FRANK L., JR. See GINSBERG, GOEBEL, and HORSFALL, 385, 411

HOWE, CALDERON. See DE BURGH, YU, HOWE, and BOVARNICK, 1

JACKSON, ELIZABETH B. See RIGHTS and SMADEL, 339

JACOBSON, L. O. See ALLEN, SANDERSON, MILHAM, KIRSCHON, and JACOBSON, 71

KABAT, ELVIN A., BENDICH, AARON, BEZER, ADA E., and KNAUB, VESTA. Immunochemical studies on blood groups. VI. The cross-reaction between Type XIV antipneumococcal horse serum and purified blood group A, B, and O substances from hog and human sources, 295

KIRSCHON, ALICE. See ALLEN, SANDERSON, MILHAM, KIRSCHON, and JACOBSON, 71

KNAUB, VESTA. See KABAT, BENDICH, BEZER, and KNAUB, 295

LALICH, JOSEPH J. The influence of available fluid on the production of experimental hemoglobinuric nephrosis in rabbits, 157

MAGILL, THOMAS P., and SUGG, JOHN Y. The reversibility of the O-D type of influenza virus variation, 535

MCCARTER, JANET R., and BEVILACQUA, ELLEN B. The proteins in unheated culture filtrates of human tubercle bacilli. II. Determination of serological properties, 245

—. See BEVILACQUA and MCCARTER, 229

MCKEE, FRANK W., SCHLOERB, PAUL R., SCHILLING, JOHN A., TISHKOFF, GARSON H., and WHIPPLE, GEORGE H. Protein metabolism and exchange as influenced by constriction of the vena cava. Experimental ascites an internal plasmapheresis: sodium chloride and protein intake predominant factors, 457

MEYER, JOE. See BARRON, BARTLETT, MILLER, MEYER, and SEEGMILLER, 503

MILHAM, MARY. See ALLEN, SANDERSON, MILHAM, KIRSCHON, and JACOBSON, 71

MILLER, ALBERT. See SMITH, BLATTNER, HEYS, and MILLER, 119

MILLER, E. C. See MILLER and MILLER, 139

MILLER, J. A., and MILLER, E. C. The carcinogenicity of certain derivatives of *p*-dimethylaminoazobenzene in the rat, 139

MILLER, ZELMA BAKER. See BARRON, BARTLETT, and MILLER, 489

—. See BARRON, BARTLETT, MILLER, MEYER, and SEEGMILLER, 503

NELSON, JOHN B. Studies on endemic pneumonia of the albino rat. III. Carriage of the virus-like agent by young rats and in relation to susceptibility, 11

NYE, ROBERT E., JR. See TERRY, SANDROCK, NYE, and WHIPPLE, 547

OLITSKY, PETER K. See GOEBEL, OLITSKY, and SAENZ, 445

OPIE, EUGENE L. An osmotic system within the cytoplasm of cells, 425

PINKERTON, HENRY. See GREIFF and PINKERTON, 175

POLLEY, JOHN R. See FRIEDMAN, POLLEY, and FRIEDMAN, 329

PUCK, THEODORE T. See DUNKLIN and PUCK, 87

RATCLIFFE, H. L., and WELLS, W. F. Tuberculosis of rabbits induced by droplet nuclei infection. I. Initial response to infection, 575

— and —. II. Response to reinfection, 585

RATHER, L. J. Renal athrocytosis and intracellular digestion of intraperitoneally injected hemoglobin in rats, 163

RATNOFF, OSCAR D. Studies on a proteolytic enzyme in human plasma. I. The probable identity of the enzymes activated by chloroform and by filtrates of cultures of beta hemolytic streptococci, 199

RATNOFF, OSCAR D. Studies on a proteolytic enzyme in human plasma. II. Some factors influencing the enzymes activated by chloroform and by streptococcal fibrinolysin, 211

RICHARDSON, EVELYN. See GOLLAN, RICHARDSON, and GOLDBLATT, 29

RIGHTS, FRED L., and SMADEL, JOSEPH E., assisted by ELIZABETH B. JACKSON. Studies on scrub typhus (tsutsugamushi disease). III. Heterogenicity of strains of *R. tsutsugamushi* as demonstrated by cross-vaccination studies, 339

ROTHBARD, SIDNEY, and TODD, EDGAR W. Production of proteinase by hemolytic streptococci in various clinical conditions, 283

— and WATSON, ROBERT F. Variation occurring in group A streptococci during human infection. Progressive loss of M substance correlated with increasing susceptibility to bacteriostasis, 521

SAENZ, ARTURO C. See GOEBEL, OLITSKY, and SAENZ, 445

SANDERSON, MARGARET. See ALLEN, SANDERSON, MILHAM, KIRSCHON, and JACOBSON, 71

SANDROCK, WILLIAM E. See TERRY, SANDROCK, NYE, and WHIPPLE, 547

SCHILLING, JOHN A. See MCKEE, SCHLOERB, SCHILLING, TISHKOFF, and WHIPPLE, 457

SCHLOERB, PAUL R. See MCKEE, SCHLOERB, SCHILLING, TISHKOFF, and WHIPPLE, 457

SCHNEIDER, HOWARD A. Nutrition of the host and natural resistance to infection. III. The conditions necessary for the maximal effect of diet, 103

SEEGMILLER, J. E. See BARRON, BARTLETT, MILLER, MEYER, and SEEGMILLER, 503

SMADEL, JOSEPH E. See RIGHTS and SMADEL, 339

SMITH, MARGARET G., BLATTNER, RUSSELL J., HEYS, FLORENCE M., and MILLER, ALBERT. Experiments on the rôle of the chicken mite, *Dermanyssus gallinae*, and the mosquito in the epidemiology of St. Louis encephalitis, 119

SUGG, JOHN Y. See MAGILL and SUGG, 535

TERRY, ROGER, HAWKINS, DAVID R., CHURCH, EDWIN H., and WHIPPLE, GEORGE H. Proteinuria related to hyperproteinemia in dogs following plasma given parenterally. A renal threshold for plasma proteins, 561

—, SANDROCK, WILLIAM E., NYE, ROBERT E., JR., and WHIPPLE, GEORGE H. Parenteral plasma protein maintains nitrogen equilibrium over long periods, 547

TISHKOFF, GARSON H. See MCKEE, SCHLOERB, SCHILLING, TISHKOFF, and WHIPPLE, 457

TODD, EDGAR W. See ROTHBARD and TODD, 283

WATSON, ROBERT F. See ROTHBARD and WATSON, 521

WELLS, W. F. See RATCLIFFE and WELLS, 575, 585

WHIPPLE, GEORGE H. See MCKEE, SCHLOERB, SCHILLING, TISHKOFF, and WHIPPLE, 457

—. See TERRY, HAWKINS, CHURCH, and WHIPPLE, 561

—. See TERRY, SANDROCK, NYE, and WHIPPLE, 547

YU, PEN-CHUNG. See DE BURGH, YU, HOWE, and BOVARNICK, 1

INDEX TO SUBJECTS

ACID, *p*-aminobenzoic, and potassium cyanide, effect on multiplication of typhus rickettsiae correlated with oxygen consumption in embryonate eggs, 175

—, periodic, inactivation of biologically active proteins and Western equine encephalomyelitis virus by, 445

Air-borne bacteria, lethal effect of relative humidity, 87

p-Aminobenzoic acid and potassium cyanide, effect on multiplication of typhus rickettsiae correlated with oxygen consumption in embryonate eggs, 175

Antibody response to killed suspensions of pathogenic *Treponema pallidum*, 369

Anticoagulant in blood of dogs with hemorrhagic tendency after total body exposure to Roentgen rays, 71

Antipneumococcal horse serum Type XIV, cross-reaction with purified blood group A, B, and O substances from hog and human sources, 295

Ascites produced by vena cava constriction resulting in internal plasmapheresis with sodium chloride and protein intake predominant factors, 457

Athrocytosis, renal, and intracellular digestion of intraperitoneally injected hemoglobin, 163

BACILLI, tubercle, human determination of serological properties of proteins in unheated culture filtrates, 245

—, tubercle, human, fractionation and determination of physical-chemical properties of proteins in unheated culture filtrates, 229

Bacteria, air-borne, lethal effect of relative humidity, 87

Bacterial virus multiplication, method of determining nutritional requirements, 259, 275

Bacteriostasis, increasing susceptibility of group A streptococci to, during human infection, correlated with progressive loss of M substance, 521

Benzene, *p*-dimethylaminoazo-, derivatives, carcinogenicity, 139

Benzoic acid, *p*-amino-, and potassium cyanide, effect on multiplication of typhus rickettsiae correlated with oxygen consumption in embryonate eggs, 175

Biologically active proteins and Western equine encephalomyelitis virus, inactivation by periodic acid, 445

Blood corpuscles, red. *See* Erythrocytes.

— group A, B, and O substances from hog and human sources, cross-reaction with Type XIV antipneumococcal horse serum, 295

— of dogs with hemorrhagic tendency after total body exposure to Roentgen rays, anticoagulant in, 71

— pressure, renal function, and electrolyte pattern, effect of desoxycorticosterone acetate, 329

Body exposure, total, to Roentgen rays, anticoagulant in blood of dogs with hemorrhagic tendency after, 71

CARCINOGENICITY of derivatives of *p*-dimethylaminoazobenzene, 139

Cells, blood, red. *See* Erythrocytes.

—, cytoplasm, osmotic system within, 425

Centrifugation, high speed, fractionation of hemolytic streptococcus by, 41
Chemical nature of virus receptors of red cells, and existence of analogous substance in normal serum, 301
— studies in host-virus interactions, method of determining nutritional requirements for bacterial virus multiplication, 259, 275
Chemical-physical properties of proteins in unheated culture filtrates of human tubercle bacilli, 229
Chemistry-immuno-, of blood groups, cross-reaction between Type XIV antipneumococcal horse serum and purified blood group A, B, and O substances from hog and human sources, 295
Chicken mite, *Dermanyssus gallinae*, and mosquito, rôle in epidemiology of St. Louis encephalitis, 119
Chloroform, factors influencing proteolytic enzymes in human plasma activated by streptococcal fibrinolysin and by, 211
—, probable identity of proteolytic enzymes in human plasma activated by filtrates of beta hemolytic streptococcus cultures and by, 199
Clinical conditions, production of proteinase by hemolytic streptococci in, 283
Coagulation in blood of dogs with hemorrhagic tendency after total body exposure to Roentgen rays, 71
Complement fixation *versus* streptococcal nucleoproteins with sera of rheumatic fever patients and others, 57
Corpuscles, blood, red. *See* Erythrocytes.
Corticosterone, desoxy-, acetate, effect on blood pressure, renal function, and electrolyte pattern, 329
Culture filtrates, beta hemolytic streptococci, probable identity of proteolytic enzymes in human plasma activated by chloroform and by, 199
— filtrates, unheated, of human tubercle bacilli, determination of serological properties of proteins in, 245
— filtrates, unheated, of human tubercle bacilli, fractionation and determination of physical-chemical properties of proteins in, 229
Cytoplasm of cells, osmotic system within, 425

DERMANYSSUS *gallinae* and mosquito, rôle in epidemiology of St. Louis encephalitis, 119
Desoxycorticosterone acetate, effect on blood pressure, renal function, and electrolyte pattern, 329
Diet, conditions necessary for maximal effect in natural resistance to infection, 103
Digestion, intracellular, of intraperitoneally injected hemoglobin, and renal athrocytosis, 163
p-Dimethylaminoazobenzene derivatives, carcinogenicity, 139
Dye, T-1824, concentration, determination in normal and lipemic plasmas, 473

EGGS, embryonate, oxygen consumption correlated with effect of *p*-aminobenzoic acid and potassium cyanide on multiplication of typhus rickettsiae, 175
Electrolyte pattern, blood pressure, and renal function, effect of desoxycorticosterone acetate, 329
Embryonate eggs, oxygen consumption correlated with effect of *p*-aminobenzoic acid and potassium cyanide on multiplication of typhus rickettsiae, 175
Encephalitis, St. Louis, epidemiology, rôle of chicken mite and mosquito, 119

Encephalomyelitis, Western equine, virus, and biologically active proteins, inactivation by periodic acid, 445
Endemic pneumonia of albino rat, carriage of virus-like agent by young rats and in relation to susceptibility, 11
Enzyme inhibitors and activators, effect on multiplication of typhus rickettsiae of *p*-aminobenzoic acid and potassium cyanide correlated with oxygen consumption in embryonate eggs, 175
Enzymes, effect of nitrogen mustards on, 489, 503
—, proteolytic, in human plasma, activated by chloroform and by filtrates of beta hemolytic streptococcus cultures, probable identity, 199
—, proteolytic, in human plasma, activated by chloroform and by streptococcal fibrinolysin, factors influencing, 211
Epidemiology of St. Louis encephalitis, rôle of chicken mite and mosquito, 119
Erythrocytes, human, substance inhibiting virus hemagglutination prepared from, 1
— and mumps virus, effect of polysaccharides on reaction between, 411
—, virus receptors, effect of partial heat inactivation of influenza virus on destruction, and use of inactivated virus in measurement of serum inhibitor, 315
—, virus receptors of, evidence on chemical nature and of existence of analogous substance in normal serum, 301

FAMILIAL associates of poliomyelitis cases, distribution of virus, 21
Fever, rheumatic. *See* Rheumatic fever.
—, typhus. *See* Typhus.
Fibrinolysin, streptococcal, factors influencing proteolytic enzymes in human plasma activated by chloroform and by, 211
Filtrates of beta hemolytic streptococcus cultures, probable identity of proteolytic enzymes in human plasma activated by chloroform and by, 199
—, unheated, of human tubercle bacillus cultures, determination of serological properties of proteins in, 245
—, unheated, of human tubercle bacillus cultures, fractionation and determination of physical-chemical properties of proteins in, 229
Fixation, complement, *versus* streptococcal nucleoproteins with sera of rheumatic fever patients and others, 57
Fluid, available, influence on production of hemoglobinuric nephrosis, 157
Food protein effect on plasma specific gravity, plasma protein, and hematocrit value, 353

HEAT inactivation, partial, of influenza virus, effect on destruction of red cell receptors, and use of inactivated virus in measurement of serum inhibitor, 315
Hemagglutination, virus, preparation from human red cells of inhibiting substance, 1
Hematocrit value, plasma specific gravity, and plasma protein, food protein effect, 353
Hemoglobin, intraperitoneally injected, intracellular digestion, and renal athrocytosis, 163
Hemoglobinuric nephrosis, influence of available fluid on production, 157
Hemolytic streptococci, beta, culture filtrates, probable identity of proteolytic enzymes in human plasma activated by chloroform and by, 199

Hemolytic streptococci in clinical conditions, production of proteinase by, 283
— streptococcus, fractionation by high speed centrifugation, 41
— streptococcus, relation to rheumatic fever, 41, 57
Hemorrhagic tendency after total body exposure to Roentgen rays, anticoagulant in blood of dogs with, 71
Heparinemia, anticoagulant in blood of dogs with hemorrhagic tendency after total body exposure to Roentgen rays, 71
Horse encephalomyelitis virus, Western, and biologically active proteins, inactivation by periodic acid, 445
— serum, antipneumococcal Type XIV, cross-reaction with purified blood group A, B, and O substances from hog and human sources, 295
Humidity, relative, lethal effect on air-borne bacteria, 87
Hyperproteinemia following plasma given parenterally, relation of proteinuria, renal threshold for plasma proteins, 561
Hypertensinase, plant, 29

IMMUNOCHEMISTRY, blood groups, cross-reaction between Type XIV antipneumococcal horse serum and purified blood group A, B, and O substances from hog and human sources, 295
Influenza virus, partial heat inactivation, effect on destruction of red cell receptors, and use of inactivated virus in measurement of serum inhibitor, 315
— virus variation, O-D type, reversibility, 535
Injection, hemoglobin, intraperitoneally, intracellular digestion, and renal athrocytosis, 163

KIDNEY athrocytosis and intracellular digestion of intraperitoneally injected hemoglobin, 163
— function, blood pressure, and electrolyte pattern, effect of desoxycorticosterone acetate, 329
— threshold for plasma proteins, proteinuria related to hyperproteinemia following plasma given parenterally, 561

LIPEMIC and normal plasmas, determination of dye T-1824 concentration in, 473

MAN, cross-reaction between Type XIV antipneumococcal horse serum and purified blood group A, B, and O substances from hog and, 295
—, infection, variation occurring in group A streptococci during, progressive loss of M substance correlated with increasing susceptibility to bacteriostasis, 521
—, plasma, probable identity of proteolytic enzymes activated by chloroform and by filtrates of beta hemolytic streptococcus cultures, 199
—, plasma, proteolytic enzymes activated by chloroform and by streptococcal fibrinolysin, factors influencing, 211
—, red cells, substance inhibiting virus hemagglutination prepared from, 1
—, tubercle bacilli, unheated culture filtrates, determination of serological properties of proteins in, 245
—, tubercle bacilli, unheated culture filtrates, fractionation and determination of physical-chemical properties of proteins in, 229
Metabolism, protein, and exchange, as influenced by vena cava constriction, ascites resulting in internal plasmapheresis with sodium chlo-

ride and protein intake predominant factors, 457
Metabolism, tissue, effect of nitrogen mustards on, 489, 503
Mite, *Dermanyssus gallinae*, and mosquito, rôle in epidemiology of St. Louis encephalitis, 119
Mosquito and chicken mite, rôle in epidemiology of St. Louis encephalitis, 119
Mumps virus and erythrocytes, effect of polysaccharides on reaction between, 411
— virus multiplication, inhibitory effect of polysaccharide, 385
Mustards, nitrogen, effect on enzymes, 489
—, nitrogen, effect on tissue metabolism, 503

NEPHROSIS, hemoglobinuric, influence of available fluid on production, 157
Nitrogen equilibrium maintained over long periods by parenteral plasma protein, 547
— mustards, effect on enzymes, 489
— mustards, effect on tissue metabolism, 503
Nucleoproteins, streptococcal, complement fixation with sera of rheumatic fever patients and others, 57
Nutrition, host, and natural resistance to infection, conditions necessary for maximal effect of diet, 103
Nutritional requirements for bacterial virus multiplication, method of determining, 259, 275

OSMOTIC system within cytoplasm of cells, 425
Oxygen consumption in embryonate eggs correlated with effect of *p*-aminobenzoic acid and potassium cyanide on multiplication of typhus rickettsiae, 175

PATHOGENIC *Treponema pallidum*, killed suspensions, antibody response to, 369
Periodic acid, inactivation of biologically active proteins and Western equine encephalomyelitis virus by, 445
Physical-chemical properties of proteins in unheated culture filtrates of human tubercle bacilli, 229
Plant hypertensinase, 29
Plasma, human, probable identity of proteolytic enzymes activated by chloroform and by filtrates of beta hemolytic streptococcus cultures, 199
—, human, proteolytic enzymes activated by chloroform and by streptococcal fibrinolysin, factors influencing, 211
— protein, parenteral, maintains nitrogen equilibrium over long periods, 547
— proteins, renal threshold, proteinuria related to hyperproteinemia following plasma given parenterally, 561
— specific gravity, plasma protein, and hematocrit value, food protein effect, 353
Plasmapheresis, internal, ascites produced by vena cava constriction resulting in, with sodium chloride and protein intake predominant factors, 457
Plasmas, lipemic and normal, determination of dye T-1824 concentration in, 473
Pneumonia, endemic, of albino rat, carriage of virus-like agent by young rats and in relation to susceptibility, 11
Poliomyelitis virus in familial associates of cases, 21
Polysaccharide, inhibitory effect on mumps virus multiplication, 385
Polysaccharides, effect on reaction between erythrocytes and mumps virus, 411

Potassium cyanide and *p*-aminobenzoic acid, effect on multiplication of typhus rickettsiae correlated with oxygen consumption in embryonate eggs, 175
Protein metabolism and exchange as influenced by vena cava constriction, ascites resulting in internal plasmapheresis with sodium chloride and protein intake predominant factors, 457
— of food, effect on plasma specific gravity, plasma protein, and hematocrit value, 353
—, plasma, parenteral, maintains nitrogen equilibrium over long periods, 547
— and sodium chloride intake predominant factors in internal plasmapheresis resulting from ascites produced by vena cava constriction, 457
Proteinase production by hemolytic streptococci in clinical conditions, 283
Proteins, biologically active, and Western equine encephalomyelitis virus, inactivation by periodic acid, 445
— in unheated culture filtrates of human tubercle bacilli, determination of serological properties, 245
— in unheated culture filtrates of human tubercle bacilli, fractionation and determination of physical-chemical properties, 229
—, nucleo-, streptococcal, complement fixation with sera of rheumatic fever patients and others, 57
—, plasma, renal threshold, proteinuria related to hyperproteinemia following plasma given parenterally, 561
Proteinuria related to hyperproteinemia following plasma given parenterally, renal threshold for plasma proteins, 561
Proteolytic enzymes in human plasma activated by chloroform and by filtrates of beta hemolytic streptococcus cultures, probable identity, 199
Proteolytic enzymes in human plasma, activated by chloroform and by streptococcal fibrinolysin, factors influencing, 211

RAYS, Roentgen. *See* Roentgen rays.
Renal. *See* Kidney.
Resistance, natural, to infection, and host nutrition, conditions necessary for maximal effect of diet, 103
Rheumatic fever patients, sera, complement fixation *versus* streptococcal nucleoproteins with, 57
— fever, relation of hemolytic streptococcus, 41, 57
Rickettsia tsutsugamushi strains, heterogenicity demonstrated by cross-vaccination, 339
Rickettsiae, typhus, multiplication, effect of *p*-aminobenzoic acid and potassium cyanide correlated with oxygen consumption in embryonate eggs, 175
Roentgen rays, anticoagulant in blood of dogs with hemorrhagic tendency after total body exposure to, 71

ST. LOUIS encephalitis, epidemiology, rôle of chicken mite and mosquito, 119
Sera of rheumatic fever patients and others, complement fixation *versus* streptococcal nucleoproteins with, 57
Serological properties of proteins in unheated culture filtrates of human tubercle bacilli, 245
Serum, horse, antipneumococcal Type XIV, cross-reaction with purified blood group A, B, and O substances from hog and human sources, 295

Serum inhibitor measured by use of influenza virus partially inactivated by heat, 315
—, normal, evidence of existence of substance, analogous to virus receptors of red cells in, 301
Sodium chloride and protein intake predominant factors in internal plasmapheresis resulting from ascites produced by vena cava constriction, 457
Specific gravity, plasma, plasma protein and hematocrit value, food protein effect, 353
Streptococcal fibrinolysis, factors influencing proteolytic enzymes in human plasma activated by chloroform and by, 211
— nucleoproteins, complement fixation with sera of rheumatic fever patients and others, 57
Streptococci, beta hemolytic, culture filtrates, probable identity of proteolytic enzymes in human plasma activated by chloroform and by, 199
—, group A, variation occurring during human infection, progressive loss of M substance correlated with increasing susceptibility to bacteriostasis, 521
—, hemolytic, in clinical conditions, production of proteinase by, 283
Streptococcus, hemolytic, fractionation, by high speed centrifugation, 41
—, hemolytic, relation to rheumatic fever, 41, 57
Susceptibility of young rats to virus-like agent of endemic pneumonia, 11

TISSUE metabolism, effect of nitrogen mustards on, 489, 503
Treponema pallidum, pathogenic, killed suspensions, antibody response to, 369
Tsutsugamushi disease, strains, heterogenicity demonstrated by cross-vaccination, 339
Tubercle bacilli, human, unheated culture filtrates, determination of serological properties of proteins in, 245
— bacilli, human, unheated culture filtrates, fractionation and determination of physical-chemical properties of proteins in, 229
Tuberculosis of rabbits induced by droplet infection, response to reinfection, 585
— of rabbits induced by droplet nuclei infection, initial response to infection, 575
Typhus rickettsiae, multiplication, effect of *p*-aminobenzoic acid and potassium cyanide correlated with oxygen consumption in embryonate eggs, 175
—, scrub, heterogenicity of strains of *Rickettsia tsutsugamushi* demonstrated by cross-vaccination, 339

VACCINATION, cross-, demonstrating heterogenicity of *Rickettsia tsutsugamushi* strains, 339
Vena cava constriction influencing protein metabolism and exchange, ascites resulting in internal plasmapheresis with sodium chloride and protein intake predominant factors, 457
Virus, bacterial, multiplication, method of determining nutritional requirements, 259, 275
— hemagglutination, preparation from human red cells of inhibiting substance, 1
—, influenza, partial heat inactivation, effect on destruction of red cell receptors, and use of inactivated virus in measurement of serum inhibitor, 315
—, influenza, variation, O-D type, reversibility, 535
—, mumps and erythrocytes, effect of polysaccharides on reaction between, 411

Virus, mumps, multiplication, inhibitory effect of polysaccharide, 385
—, poliomyelitis, in familial associates of cases, 21
— receptors of red cells, effect of partial heat inactivation of influenza virus on destruction, and use of inactivated virus in measurement of serum inhibitor, 315
— receptors of red cells, evidence on chemical nature and of existence of analogous substance in normal serum, 301
—, Western equine encephalomyelitis, and biologically active proteins, inactivation by periodic acid, 445
Virus-host interactions, method of determining nutritional requirements for bacterial virus multiplication, 259, 275
Virus-like agent of endemic pneumonia of albino rat carried by young rats and in relation to susceptibility, 11

WESTERN equine encephalomyelitis virus, and biologically active proteins, inactivation by periodic acid, 445

X-RAYS. *See* Roentgen rays.